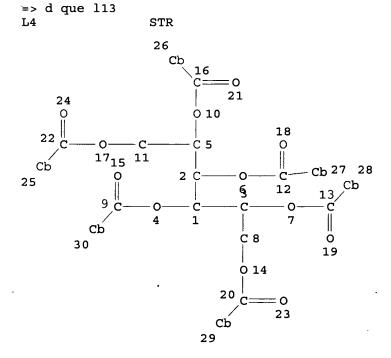
```
=> fil reg
FILE 'REGISTRY' ENTERED AT 15:14:55 ON 23 DEC 2005
=> d his
     FILE 'HCAPLUS' ENTERED AT 14:29:59 ON 23 DEC 2005
              1 S US20050164891/PN
L1
                SEL RN
     FILE 'REGISTRY' ENTERED AT 14:30:23 ON 23 DEC 2005
              9 S E1-E9
L2
              1 S L2 AND HEXABEN?
L3
                STR 860473-65-0
L4
              7 S L4
L5
             64 S L4 FUL
L6
              3 S L6 AND L2
L7
                SAV L6 CHA667/A
     FILE 'HCAPLUS' ENTERED AT 14:49:39 ON 23 DEC 2005
rs
             48 S L6
              1 S L8 AND SAG?
L9
              1 S L8 AND FOSSIL?/SC,SX
L10
              2 S L8 AND (WELL? OR DRILL? OR EMULS? OR FUEL?)
Lll
              3 S L8 AND COMPOSITION?
L12
L13
              4 S L9-L12
             44 S L8 NOT L13
L14
```



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED

### NUMBER OF NODES IS 30

```
STEREO ATTRIBUTES: NONE
           64 SEA FILE=REGISTRY SSS FUL L4
L6
            48 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L8
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND SAG?
L9
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND FOSSIL?/SC,SX
L10
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND (WELL? OR
L11
              DRILL? OR EMULS? OR FUEL?)
             3 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND COMPOSITION?
L12
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON (L9 OR L10 OR L11 OR
L13
               L12) ·
```

### => fil hcap

FILE 'HCAPLUS' ENTERED AT 15:15:11 ON 23 DEC 2005

#### => d l13 1-4 ibib abs hitstr hitind

L13 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:672845 HCAPLUS

DOCUMENT NUMBER:

143:156047

TITLE:

Methods of reducing sag in

non-aqueous drilling fluids using

cystol ester for wells

INVENTOR(S):

Falana, Olusegun M.; Patel, Bharat B.;

Stewart, Wayne S.

PATENT ASSIGNEE(S):

USA

SOURCE: U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

F	PATENT NO.					KIND		DATE			APPLICATION NO.					DATE		
-																		
- U	US 2005164891				A1		20050728			US 2004-764667								
														2004				
														01	26			
W	WO 2005073336				A1 20050811			,	WO 2005-US225									
																20		
																01	05	
		W:			•				•	-	-	•	•	-	BY,	•		
				•		•		•		-		•	•	-	EE,	•		
			ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,		
			KΕ,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,		
			MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,		
			PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	TR,		
			TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	•	•		
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,		
			ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,		
			CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,		
			LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,		
			CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
PRIORITY APPLN. INFO.:					. :					1	US 2004-764667				7	A		
																20	04	

0126

- AΒ Methods of reducing sag include combining a cystol ester compound with a nonaq. fluid and particles to reduce sag in the resulting fluid composition without significantly increasing the viscosity of the fluid composition The fluid composition comprises the nonaq. fluid, the particles, and the cystol ester compound Suitable cystol ester compds. include cystol ester and derivs. of cystol ester having mono-, di-, or tri-substituted aromatic compds. as substituents. The nonaq. fluid may comprise an invert emulsion, diesel oil, mineral oil, an olefin, an organic ester, a synthetic fluid, or combinations thereof. Further, the fluid composition may be used as a well-bore servicing fluid such as a drilling fluid. The particles may comprise a weighting agent, e.g., barite, galena, hematite, dolomite, calcite, or combinations thereof. The fluid composition may also include organophilic clay.
- IT 860456-57-1P 860456-58-2P 860473-65-0P

(methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

- RN 860456-57-1 HCAPLUS
- CN Hexitol, hexakis(4-methylbenzoate) (9CI) (CA INDEX NAME)

PAGE 1-A

Me

$$C = 0$$
 $C = 0$ 
 $C = 0$ 

PAGE 2-A

RN 860456-58-2 HCAPLUS

CN Hexitol, hexakis[4-(1,1-dimethylethyl)benzoate] (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 860473-65-0 HCAPLUS

CN Hexitol, hexabenzoate (9CI) (CA INDEX NAME)

IC ICM C09K007-06

INCL 507103000

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

ST sag nonaq drilling fluid well cystol

ester particle clay

IT Emulsions

(diesel fuel; methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

IT Diesel fuel

(emulsions; methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

IT Drilling fluids

(inverted emulsions; methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

IT Drilling fluids

Natural gas wells

Oil wells

Particles

Viscosity

Wells

(methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

IT Alkenes, uses

Esters, uses

Hydrocarbon oils

(methods of reducing **sag** in non-aqueous **drilling** fluids using cystol ester for **wells**)

IT Clays, uses

(organophilic; methods of reducing **sag** in non-aqueous **drilling** fluids using cystol ester for **wells**)

IT Emulsions

(water-in-oil; methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

IT 45007-61-2DP, Hexitol, ester compound 860456-57-1P 860456-58-2P 860473-65-0P

(methods of reducing sag in non-aqueous drilling fluids using cystol ester for wells)

L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:321059 HCAPLUS

DOCUMENT NUMBER:

131:129731

TITLE:

The importance of micro segregation for

mesophase formation: thermotropic columnar

mesophases of tetrahedral and other low-aspect-ratio organic materials Pegenau, Annegret; Hegmann, Torsten; Tschierske, Carsten; Diele, Siegmar Institut fur Organische Chemie der

Martin-Luther-Universitat Halle-Wittenberg,

Halle, D-06120, Germany

SOURCE: Chemistry--A European Journal (1999), 5(5),

1643-1660

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

AUTHOR (S):

CORPORATE SOURCE:

Several low-aspect-ratio organic mols. [tetrahedral pentaerythritol derivs., peracylated polyhydroxy compds. and aminoalcs., a tetraphenylmethane derivative, a tetraphenylstannane, and a tetrahedral zinc bis(1,3-diketonate) all carrying long aliphatic chains] have been synthesized. These compds. were investigated by polarizing optical microscopy and differential scanning calorimetry, and some of them by X-ray diffraction. Most compds. show columnar liquid-crystalline mesophases. Their mesogenic properties are neither caused by a specific anisometric shape of these mols. nor by a strong amphiphilicity as known from conventional liquid crystals. Instead their mesogenity is mainly driven by micro segregation of the incompatible mol. parts (polar central regions and lipophilic alkyl chains) into well-organized different microdomains. It is shown that, in analogy to block copolymers, the mesophase stability rises on enlarging the number of repeat units connected with each other and on increasing the degree of incompatibility between the incompatible segments. During the process of self-organization the average conformation of the mols. is changed in such a way that it allows a most efficient packing of the mols. Consequently, rigid mols. with a fixed tetrahedral geometry are not mesogenic. The mols. described herein can be regarded as the most simple star-shaped low-aspect-ratio block mols. that form liquid-crystalline phases. They bridge the gap between classical amphiphilic mesogens, several nonconventional dendritic and oligomeric liquid crystals, and mesomorphic block copolymers.

IT 205390-78-9P

(preparation of starlike low-aspect-ratio organic materials and their liquid crystalline phase properties)

RN 205390-78-9 HCAPLUS

CN D-Mannitol, hexakis[3,4-bis(decyloxy)benzoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# PAGE 1-A

# PAGE 1-B

PAGE 2-A

$$(CH_2)_9$$
 $(CH_2)_9$ 
 $(CH_2)_9$ 
 $(CH_2)_9$ 
 $(CH_2)_9$ 
 $(CH_2)_9$ 
 $(CH_2)_9$ 

CC 25-17 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 22, 33, 75

IT 185433-76-5P 185433-77-6P 185433-78-7P 185433-79-8P 185433-80-1P 185433-81-2P 185433-82-3P 185433-83-4P 185433-84-5P 185433-85-6P 185433-86-7P 205390-70-1P 205390-72-3P 205390-73-4P 205390-74-5P 205390-75-6P 205390-76-7P 205390-77-8P 205390-78-9P 233661-08-0P 233661-09-1P 233661-10-4P 233661-11-5P 233661-12-6P 233661-13-7P 233661-14-8P 233661-15-9P 233661-16-0P 233661-17-1P 233661-18-2P 233661-19-3P 233661-20-6P 233661-22-8P 233661-23-9P 233661-24-0P 233661-21-7P 233770-55-3P

(preparation of starlike low-aspect-ratio organic materials and their liquid crystalline phase properties)

REFERENCE COUNT:

THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

80

ACCESSION NUMBER:

1987:214947 HCAPLUS

DOCUMENT NUMBER:

106:214947

TITLE:

Benzoate-stabilized rigid poly(vinyl chloride)

compositions

INVENTOR(S):

Reid, William J.; Zappia, Jean M.; Capocci,

Gerald A.; Spivack, John D.

PATENT ASSIGNEE(S):

Ciba-Geigy Corp., USA

SOURCE:

U.S., 4 pp. Cont.-in-part of U.S. 4,555,541.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4619957	A	19861028	US 1985-764282	1985 0809

0213

GΙ

$$\begin{bmatrix} R \\ HO \\ \hline \\ R \end{bmatrix} = \begin{bmatrix} CO_2 \\ T \end{bmatrix}$$

AB Rigid PVC containing the esters I (R = alkyl; Z = alkanetrihexayl; n = 3-6) have good UV resistance and impact strength at low concns. (2-8%) of TiO2. Adding 57.3 g 90% 3,5-di-tert-butyl-4-hydroxybenzoyl chloride over 20 min to D,L-mannitol in 400 mL pyridine stirred at 20° and stirring 20 h at 65-70° gave a hexaester (II). Compounded, rigid PVC containing 1 phr II and 5 phr TiO2 had yellowness index 5.9 and 4.3 after 0 and 600 h, resp., at Weatherometer exposure (55-60°, 70-75% relative humidity); vs. 7.4 and 8.1, resp., without II.

IT 108352-81-4 108375-88-8

(light stabilizers, for rigid PVC)

RN 108352-81-4 HCAPLUS

CN Mannitol, hexakis[3,5-bis(1,1-dimethylethyl)-4-hydroxybenzoate]
(9CI) (CA INDEX NAME)

Relative stereochemistry.

### PAGE 1-A

# PAGE 2-A

RN

108375-88-8 HCAPLUS D-Glucitol, hexakis[3,5-bis(1,1-dimethylethyl)-4-hydroxybenzoate] CN(9CI) (CA INDEX NAME)

### PAGE 1-A

ICM C08K005-58 IC

INCL 524091000

37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 25

IT 4376-79-8 56497-27-9 106712-55-4 108352-81-4

108375-88-8

(light stabilizers, for rigid PVC)

L13 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:165395 HCAPLUS

104:165395

DOCUMENT NUMBER: TITLE:

Further constituents of Adenia cissampeloides

AUTHOR(S):

Morah, Francis N. I.

CORPORATE SOURCE:

Dep. Chem., Coll. Educ., Nsugbe, Onitsha,

Nigeria

SOURCE:

Journal of the Indian Chemical Society (1985),

62(9), 712-13

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Stems of A. cissampeloides were defatted with light petroleum and extracted with a MeOH-acetone mixture (1:1), followed by partitioning between ether and H2O. The polar fraction was chromatographed over deactivated silica to yield sucrose and NaCl. An EtOH extract of the stems yielded D-mannitol by crystallization Compds. were identified by physicochem. characterization.

IT 7462-41-1P

(preparation of)

RN 7462-41-1 HCAPLUS

CN D-Mannitol, hexabenzoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

CC 11-1 (Plant Biochemistry)

ST Adenia compn sucrose sodium chloride mannitol

IT Adenia cissampeloides

(composition of)

IT 3969-59-3P **7462-41-1P** (preparation of)

=> d l14 1-44 ti

L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN

TI Polymers of pharmacological interest. Nonaqueous titrimetry

L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN

TI Preparation of inclusion compounds or molecular complexes of pesticides with sugar esters

L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN

TI Enteric coating. VI. Saccharide and polyhydric alcohol hydrogen phthalates

L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN

TI Crystalline D-glycero-L-gluco-octulose, crystalline methyl D-glycero- $\alpha$ -L-gluco-octulopyranoside, and some related compounds

- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Esters of polyols and polycarboxylic acids and their preparation and use with metal salts for tanning
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Enteric coatings from monosaccharides, disaccharides, and polyhydric alcohol
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Polyol-poly(diallyltrimellitates)
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Amine-induced deacylation of carbohydrate derivatives under anhydrous conditions
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Aspects of stereochemistry. VII. Structure of some cyclic acetals of D-glycero-D-gluco-heptitol ( $\beta$ -sedoheptitol)
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Some properties of 4-nitrobenzoates of saccharides and glycosides; application to high-pressure liquid chromatography
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Liquid crystalline tetrahedra and low-aspect ratio organic materials
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Some new esters of sorbitol
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Chemical examination of the roots of Gardenia turgida Roxb
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI N-Methylimidazole as a catalyst in hydroxy compounds esterification
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Constituents of local plants. V. The constituents of various parts of the pomegranate plant
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Mass spectrometry of some ultraviolet absorbing derivatives of sugars and related alditols: identification in biologic fluids after separation by high performance liquid chromatography
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Preparation of gallic acid esters and their use as ADP-ribosyltransferase inhibitors for treatment of intestinal infection by endotoxin-producing bacteria
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Polyhydric alcohol esters of acetylsalicylic acid
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Proton NMR studies of D-mannitol derivatives
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Solutions for storage of ink-jet printing heads

- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI The Wohl reaction applied to some benzoylated aldononitriles
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Proton NMR spectra and conformation of some benzoyl alditols
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Efficient Synthesis of Enantiopure Conduritols by Ring-Closing Metathesis
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Aromatic carboxylate derivatives
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Carbon-13 NMR spectra of some acyclic perbenzoylated carbohydrate derivatives
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Identification in traditional herbal medications and confirmation by synthesis of factors that inhibit cholera toxin-induced fluid accumulation
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Synthesis of O-acylaldonamides
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Conformation of some benzoylated aldononitriles and 5-(polybenzoyloxyalkyl)tetrazoles as determined by their proton NMR spectra
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Use of DSC To Detect the Heterogeneity of Hydrothermal Stability in the Polyphenol-Treated Collagen Matrix
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI L-Gulonic acid derivatives. II. Benzoyl migration in derivatives of D-glucitol
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Isopropylidenation of maltitol and a new synthetic approach for disaccharides having an  $\alpha\text{-glycosidic linkage}$
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Structure-activity relationships in the hydrophobic interactions of polyphenols with cellulose and collagen
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Synthesis and properties of aliphatic polyesters of 2-hydroxy- and 2-acetoxybenzoic acids
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Structure of galactitol hexa(p-chlorobenzoate)
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Synthesis and spectroscopic characterization of the polygalloyl esters of polyols-models for gallotannins
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Synthesis and properties of 2-hydroxy- and 2-acetoxy-5-iodobenzoic

## acid polyesters of short-chain aliphatic polyalcohols

- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Application of the exciton chirality method to acyclic systems: circular dichroism of acyclic sugar poly-p-chlorobenzoates
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Exciton Cotton Effects of Benzoates in the 1B Transition Region.
  Demonstration and Applications
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Determination of bond types of polysaccharides
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Mass spectra of some per-O-benzoylalditols and -aldobiitols
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Chemical constitution and the tanning effect. I. Simple esters and polyesters of gallic acid
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Nonaqueous titrimetry study of polymers of pharmacological interest
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Unusual solid-state conformation of D-glucitol hexa(p-chlorobenzoate)
- L14 44 ANSWERS HCAPLUS COPYRIGHT 2005 ACS on STN
- TI Trifluoroacetic acid. I. Trifluoroacetic anhydride as a promotor of ester formation between hydroxy compounds and carboxylic acids